

Practice Quiz – Unit 4

Triangle Congruence

v1

Name _____
Date _____
Period _____

1) Define **congruence** in two ways.

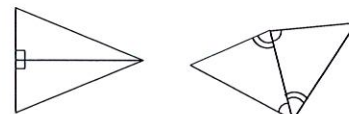
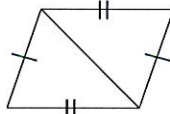
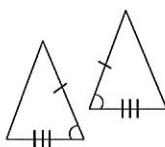
2) Match each postulate with a diagram that it represents by writing the letter below the correct diagram.

a.) SSS

b.) SAS

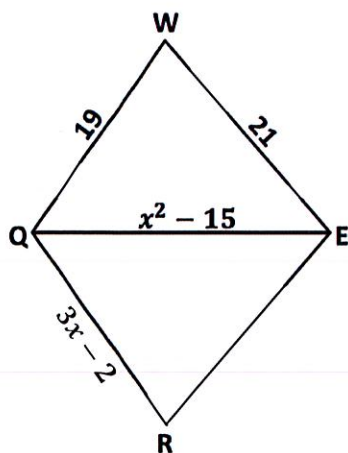
c.) ASA

d.) AAS



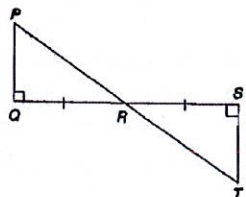
3) If $\triangle BCR \cong \triangle DFH$, then $\angle HDF \cong$ _____ and $\overline{CR} \cong$ _____.

4) If $\triangle WQE \cong \triangle RQE$, then solve for x and find QE .

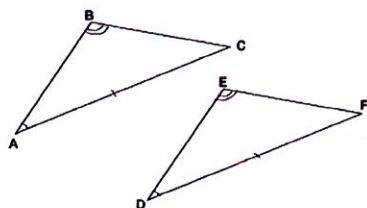


$x =$ _____ $QE =$ _____

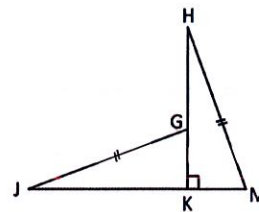
5) For each set of triangles below, determine if they are congruent or if you don't have enough information. If they are congruent, then write the congruency statement and say which postulate proves it (SSS, SAS, ASA, or AAS).



- a.) Congruent? _____
 b.) $\triangle RPQ \cong$ _____
 c.) Post.: _____

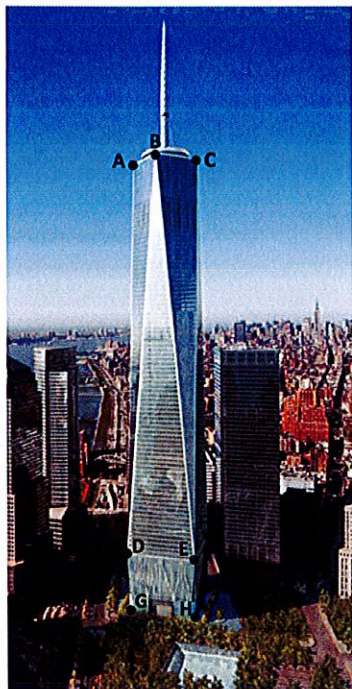
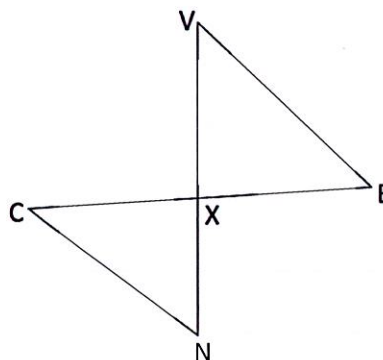


- a.) Congruent? _____
 b.) $\triangle CAB \cong$ _____
 c.) Post.: _____



- a.) Congruent? _____
 b.) $\triangle GJK \cong$ _____
 c.) Post.: _____

6) In the figure to the right $\overline{CX} \cong \overline{BX}$. What other piece of information is required in order for the triangles to be congruent by **SAS**?



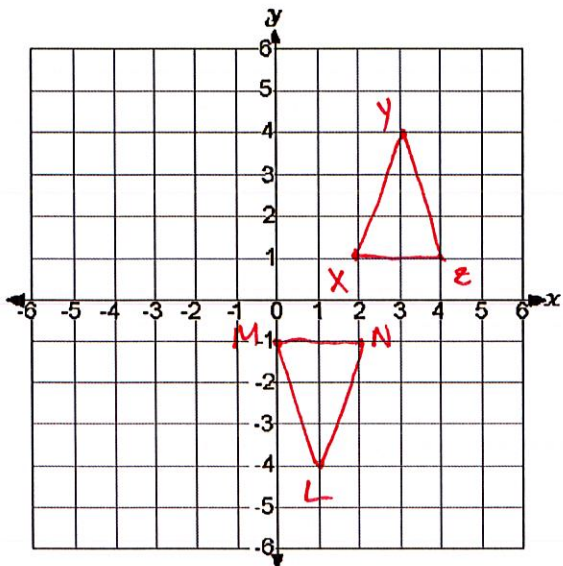
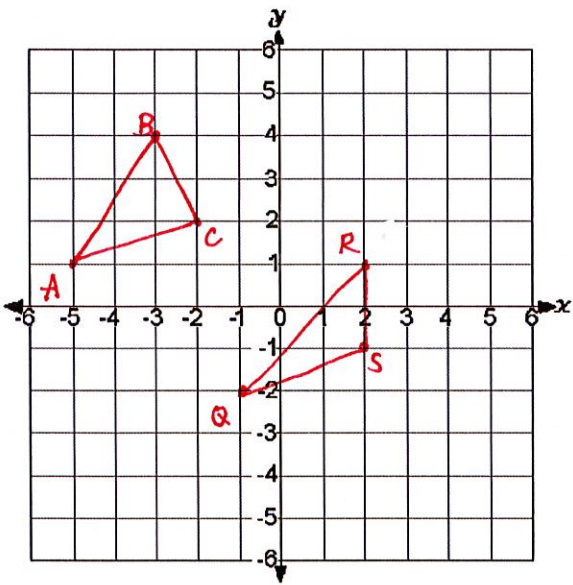
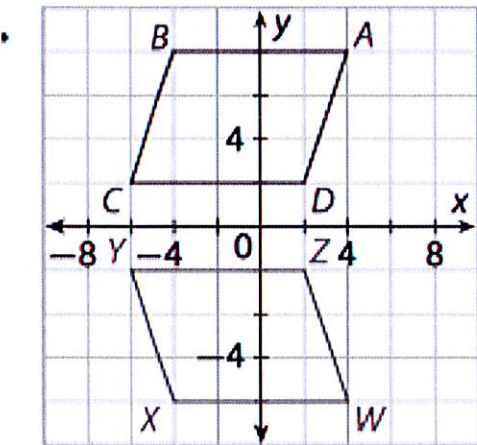
7) The new World Trade Center in New York City has a total of 8 congruent triangles on its surface. In the picture to the right, $\triangle DBE \cong \triangle CEB$.

$\overline{BE} = 1172$ feet and $\overline{DE} = 200$ feet. Also, $m\angle DBE = 19^\circ$ and $m\angle BED = 74.5^\circ$

a.) What is the measurement of \overline{CB} ? Include units. _____

b.) What is the measurement of $\angle CEB$? Include units. _____

8) For each set of figures below, determine whether or not they are congruent. Justify your answer using rigid motions.



Directions: Find each angle and **justify** your answer.

